



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,798	12/20/2001	Hidetaka Numata	9281-4256	5394

7590 11/04/2003

Brinks Hofer Gilson & Lione
P.O. Box 10395
Chicago, IL 60610

EXAMINER

AWAD, AMR A

ART UNIT	PAPER NUMBER
----------	--------------

2675

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/036,798

Applicant(s)

NUMATA ET AL.

Examiner

Amr Awad

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The Examiner has considered the reference cited in the information disclosure statement filed 12/20/2001; see attached PTO-1449.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Levin et al. (US patent NO. 6,154,201; hereinafter referred to as Levin).

As to independent claim 1, Levin (figure 1) teaches a manual input device (10) that includes a knob (18), feeling providing device, which has at least two kinds of feeling patterns (col. 7 lines 58-65 and 8, lines 3-23), and an actuator (by pushing the knob 18) which activates the feeling providing device and change an operation feeling given to the knob (col. 8, lines 3-8).

As to claim 2, Levin teaches having the knob manipulated by linear movement (col. 4, lines 25-29).

As to claims 3-4, as can be seen from figure 1, Levin shows rotation movement by the knob 18 (col. 5, lines 47-51).

As to claim 5, Levin (figures A, 3B and 4A) teaches that the device includes one disc (52) and cylinder (70), which bears plural feeling patterns (54) and is fixed to control shaft (50) to be manipulated by the knob (18) (col. 8, lines 30-64), and one of a ball (84) and pin (50) elastically forced to contact the one of the disc and cylinder, and wherein the actuator (70) linearly reciprocates the one of the ball and pin in a direction where the plural feeling are arranged (col. 12, lines 26-56).

As to claim 6, the different between claims 6 and 5 is that claim 6 recites having a disc and cylinder, which has a single feeling pattern. As can be seen in figure 5, the other knob fairly reads on the claimed limitation (col. 14, lines 5-27).

As to claim 7, Levin (figures A, 3B and 4A) teaches that the device includes one disc (52) and cylinder (70), which bears plural feeling patterns (54) and is fixed to control shaft (50) to be manipulated by the knob (18) (col. 8, lines 30-64)

As to independent claim 8, Levin (figure 1) teaches a manual input device (10) that includes a knob (18), feeling providing device, which provides the knob with an operation feeling (col. 7, lines 58-65 and col. 8 lines 3-23), and an actuator (by pushing the knob 18), which activates the feeling-providing device (col. 8, lines 3-8). Levin teaches a detector (sensor 214 in fig. 8) for detecting the operating condition of the knob, and an input/output section, which exchanges signals with an external device,

Art Unit: 2675

controlled by the knob, wherein the actuator is controlled according to a control signal generated based on an external signal from an external detector connected at least with the external device (col. 8, line 65 through col. 9, line 12).

As to claims 9-14; these claims are substantially similar to the apparatus of claims 2-7 and would be analyzed as previously discussed with respect to claims 2-7.

As to independent claims 15-17, the claims are substantially similar to the device of claim 8 and would be analyzed as previously discussed with respect to claim 8.

As to claims 18-19, the claims are substantially similar to claim 8 above except that claims 18-19 further recite a car-mounted apparatus. Levin teaches that the device is used inside a car (col. 7, line 66 through col. 8, line 22).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Good et al. (US patent NO. 5,185,561) teaches a torque motor as a tactile feedback device in a computer system.

Culver (US patent NO. 6,256,011) teaches a multi-function control device with force feedback.


Kataoka et al. (US patent NO. 6,476,794) teaches a system switch that includes mode switch and low-ranking switches.

Art Unit: 2675

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amr Awad whose telephone number is (703)308-8485. The examiner can normally be reached on Monday-Friday, between 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras can be reached on (703)305-9720. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4750.


10-27-03

A.A.